

ABSTRACT

The present invention provides a compact, inexpensive, large-capacity ozone generator and increases the ease of apparatus maintenance. An ozone power supply that is included in the present invention comprises an n-phase inverter for effecting conversion to obtain an AC voltage having a predetermined frequency and outputting an n-phase AC voltage waveform; n reactors and n-phase transformer for converting an n-phase AC voltage to a high AC voltage; n high-voltage terminals for outputting an n-phase high AC voltage; and a low-voltage terminal having a common potential. A plurality of ozone generator units that are included in the present invention are electrically divided into n pieces within a discharge chamber. From each ozone generator unit, n high-voltage electrode terminals and one low-voltage electrode terminal, which is common to all low-voltage electrodes of the ozone generator units, are pulled out to connect n high-voltage terminals to n high-voltage electrode terminals. Further, one low-voltage electrode terminal is connected to a low-voltage terminal so that each ozone generator unit invokes an n-phase AC discharge to generate ozone.